Remarks

A. Status of Claims

Claims 332-334 and 339 have been canceled. Claim 309 has been amended. No new matter has been added. Claims 309, 311-321, 323, 324, 326-331, 335-338, and 340-341 will be pending upon entry of the amendments presented here.

B. Withdrawn Rejections

Applicants appreciate the acknowledgement that the previous rejections have been withdrawn.

C. Section 112 Rejection

The claims stand rejected under 35 U.S.C. § 112, first paragraph (written description) due to the use of the phrase "according to predetermined spacings." Applicants respectfully traverse. The present specification and figures support this language, as explained in the previous response. As acknowledged by the Office, the specification also supports the analogous concept of an ordered array. Additionally, Applicants respectfully submit that the Office has not discharged its initial burden of establishing why the specification would not convey with reasonable clarity to those of ordinary skill in the art that, as of the filing date, the inventors were in possession of the claimed invention. *See Vas-Cath, Inc. v. Marhurkar*, 19 U.S.P.Q.2d 1111, 1117 (Fed. Cir. 1991).

Nevertheless, in an effort to advance prosecution, Applicants have amended claim 309 in a non-narrowing manner to remove the disputed phrase "according to predetermined spacings." Applicants have retained the language concerning an ordered array. Applicants respectfully request withdrawal of this rejection.

D. Section 103 Rejection

Claims 309, 311-315, 317-319, 323-324, 326-335, 337-339, and 341 stand rejected under 35 U.S.C. § 103(a) as being obvious in view of the Lavigne article ("Lavigne") in combination with U.S. Patent No.5,866,430 ("Grow"). Applicants respectfully submit that the present claims are patentable over these references, alone or in combination.

Amended claim 309 includes a combination of features including, but not limited to a sensor array comprising:

> a plurality of assembled layers comprising a barrier layer and a spacer layer;
> wherein the barrier layer is positioned over the cavity and is configured to inhibit dislodgment of the particle during use, the barrier layer comprising a substantially transparent cover plate positioned such that a first channel is formed between an upper surface of the supporting member and the barrier layer, and wherein the fluid passes through the first channel during use; and
> wherein the spacer layer forms a second channel under the sensor array, and wherein the fluid passes through the second channel during use

Support for the amendment associated with these claim elements may be found throughout the specification, and the Office is pointed to at least page 164, lines 1-25 and accompanying figures. Lavigne and Grow do not include at least such features.

Neither Lavigne nor Grow disclose or suggest the claimed combination including a sensor array having a plurality of layers, where a barrier layer contributes to the formation of a first channel between it and a supporting layer and a spacer layer contributes to the formation of a second channel under the sensor array (as those elements are specifically claimed) - and where fluid passes through such channels during use.

Dependent claims 312, 316, 319-321, 336, and 340 stand rejected under 35 U.S.C. § 103(a) as being obvious in view of Lavigne in combination with Grow along with tertiary references, as discussed in the Office Action at pages 7-10. Applicants respectfully submit that the present claims are patentable over these references, alone or in combination, for at least the reasons given above with respect to independent claim 309. Applicants reserve the right to argue for separate patentability of these, or other, dependent claims if necessary.

E. Conclusion

Applicants believe that this response addresses all the points raised in the Office Action and respectfully requests favorable reconsideration of this application.